TABLE 6-2

Transportation-Related Land Use STRATEGY PACKAGES for *SUBURBAN AREAS*

STRATEGY DESCRIPTION	Suburban Level 1 *(Performance Goal: <22,000 VMT/HH)**	Suburban Level 2 *(Performance Goal: 20,000 - 22,000)**	Suburban Level 3 *(Performance Goal: 22,000 - 25,000)**	SUPPORTIVE FACTORS
STRATEGY CHARACTERISTICS:				
1. **Strengthen Downtowns** Single or predominant city center that incorporates a primary employment center, with supporting housing, commercial, and region-serving public/cultural uses	**Locate significant retail, office, conference, housing, public service and entertainment activities downtown.**	***same as for Suburban Level 1***	***Implement Strategy if Progression to next higher level is desired.***	- Direct pedestrian routes to surrounding neighborhoods - Pedestrian facilities within the downtown - High quality local and regional transit connections - Commercial buildings oriented to sidewalks
2. **Develop Concentrated Activity Centers** Primary employment concentrated in a limited number of carefully planned centers with functionally-integrated complementary uses, including residential units.	**The number of Concentrated Activity Centers will vary with the size of the jurisdiction and the metropolitan area.**	***same as for Suburban Level 1***	***Implement Strategy if Progression to next higher level is desired.***	- Auto uses discouraged for internal circulation - Pedestrian facilities - Provision of services for employees - Transit service - Proximity to residential areas

* Performance Goal Level: Average Vehicle Miles Traveled per Household per Year

TABLE 6-2

Transportation-Related Land Use STRATEGY PACKAGES for *SUBURBAN AREAS*

STRATEGY CHARACTERISTICS:

STRATEGY DESCRIPTION	Suburban Level 1 *(Performance Goal: <22,000 VMT/HH)**	Suburban Level 2 *(Performance Goal: 20,000 - 22,000)**	Suburban Level 3 *(Performance Goal: 22,000 - 25,000)**	SUPPORTIVE FACTORS
3. **Encourage Mixed-Use Development** Mixed use residential and commercial development. Vertical and horizontal mixed-use, i.e., within and between buildings	**Goals for larger sites; minimum % of gross floor area:** ***Office center:*** **- Office 30%** **- Retail 10%** **- Public 10%** **- Residential 10%** ***Retail-cultural center:*** **- Retail, hotel, entertainment 20%** **- Office 10%** **- Public 15%** **- Residential 10%** ***Neighborhood center:*** **- Residential 30%** **- Retail/Office 15%** **- Public 15%** ***Residential area:*** **- Residential 40%** **- Retail/Office 10%** **- Public 10%** **-**	**Goals for larger sites; minimum % of gross floor area:** ***Office center:*** **- Office 25%** **- Retail 10%** **- Public 10%** **- Residential 10%** ***Retail-cultural center:*** **- Retail, hotel, entertainment 20%** **- Office 10%** **- Public 15%** **- Residential 10%** ***Neighborhood center:*** **- Residential 30%** **- Retail/Office 10%** **- Public 10%** ***Residential area:*** **- Residential 40%** **- Retail 10%** **- Public 10%**	**Goals for larger sites; minimum % of gross floor area:** ***Office center:*** **- Office 20%** **- Retail 10%** **- Public 10%** **- Residential 15%** ***Retail-cultural center:*** **- Retail, hotel, entertainment 10%** **- Office 10%** **- Public 15%** **- Residential 20%** ***Neighborhood center:*** **- Residential 30%** **- Retail 10%** **- Public 10%** ***Residential area:*** **- Residential 40%** **- Retail 10%** **- Public 10%**	- Pedestrian and bicycle facilities - Interconnected street pattern - Services within walking and bicycling distance of workplaces (1/4 to 1/2 mile)

* Performance Goal Level: Average Vehicle Miles Traveled per Household per Year

TABLE 6-2

Transportation-Related Land Use STRATEGY PACKAGES for *SUBURBAN AREAS*

STRATEGY DESCRIPTION	**Suburban Level 1** *(Performance Goal: <22,000 VMT/HH)**	**Suburban Level 2** *(Performance Goal: 20,000 - 22,000)**	**Suburban Level 3** *(Performance Goal: 22,000 - 25,000)**	SUPPORTIVE FACTORS
	STRATEGY CHARACTERISTICS:			
4. **Encourage Infill and Densification** Infill development creates clusters of higher residential density and adds employment to jobs-poor urbanized areas	Density at a minimum of **16 or more dwelling units/net** residential acre, on average.	Density at a minimum of **12 or more dwelling units/net** residential acre, on average.	Density at a minimum of **10 or more dwelling units/net** residential acre, on average.	- Pedestrian and bicycle facilities - Interconnected street pattern - Employment centers and retail services near residential clusters - Transit service to residential clusters
5. **Increase Density Near Transit Corridors** Compact residential and commercial uses within 1/4 to 1/2 mile of major transit corridors	***Residential density:*** minimum of **22 dwelling units/net**[1] residential acre,on average. ***Commercial intensity:*** minimum of **260 employees** per net commercial acre, except theaters and hotels **(Floor Area Ratio (FAR) about 1.6).**[2]	***Residential density*:** minimum of **16 dwelling units/net** residential acre, on average. ***Commercial intensity:*** minimum of **230 employees** per net commercial acre, except theaters and hotels **(FAR about 1.4).**	***Residential density:*** minimum of **14 dwelling units/net** residential acre, on average. ***Commercial intensity:*** minimum of **190 employees** per net commercial acre, except theaters and hotels. **(FAR about 1.2).**	- Pedestrian facilities - **20-min. transit headways or less,**[3] *especially in peak periods* - Multiple bus routes - Interconnected street pattern - New auto-oriented uses discouraged along corridor

[1] number of dwelling units per residentially-zoned acre (excluding commercial and other uses, streets, open space, etc.)

[2] FAR = 'Floor Area Ratio' - the ratio of a building's floor area to the size of the parcel or lot, including parking areas.

[3] Transit headway = the frequency of transit service to a particular location.

* Performance Goal Level: Average Vehicle Miles Traveled per Household per Year

TABLE 6-2

Transportation-Related Land Use STRATEGY PACKAGES for *SUBURBAN AREAS*

STRATEGY DESCRIPTION	**Suburban Level 1** *(Performance Goal: <22,000 VMT/HH)**	**Suburban Level 2** *(Performance Goal: 20,000 - 22,000)**	**Suburban Level 3** *(Performance Goal: 22,000 - 25,000)**	SUPPORTIVE FACTORS
	STRATEGY CHARACTERISTICS:			
6. **Increase Density Near Transit Stations** Compact residential and commercial uses within 1/4 to 1/2 mile of significant stations	***Residential density:*** At least **30 dwelling units/net** residential acre, on average. ***Commercial intensity:*** minimum of **290 employees** per net commercial acre, except theaters and hotels. **(Floor Area Ratio - FAR - about 1.8)**	***Pursue Strategy if Basic Infrastructure Exists:*** ***Residential density:*** At least **20 dwelling units/net** residential acre, on average. ***Commercial intensity:*** minimum of **260 employees** per net commercial acre, except theaters and hotels. **(FAR about 1.6)**	***Pursue Strategy if Basic Infrastructure Exists:*** ***Residential density:*** At least **16 dwelling units/net** residential acre, on average. ***Commercial intensity:*** minimum of **230 employees** net commercial acre, except theaters and hotels. **(FAR about 1.4)**	- Pedestrian facilities - **20-min. transit headways or less,** *especially in peak periods* - New auto-oriented uses discouraged near transit stations

TABLE 6-2

Transportation-Related Land Use STRATEGY PACKAGES for *SUBURBAN AREAS*

STRATEGY DESCRIPTION	**Suburban Level 1** *(Performance Goal: <22,000 VMT/HH)**	**Suburban Level 2** *(Performance Goal: 20,000 - 22,000)**	**Suburban Level 3** *(Performance Goal: 22,000 - 25,000)**	SUPPORTIVE FACTORS
	STRATEGY CHARACTERISTICS:			
7. **Provide Pedestrian Facilities** Direct, accessible pedestrian routes to encourage walking	***Design features include:*** - **crosswalks and pedestrian-actuated traffic signals** - **wide sidewalks (5-10 ft)** - **protection from fast vehicular traffic** - **short block-faces** - **minimal building setbacks** - **on-street entries to buildings**	***same as for Suburban Level 1***	***same as for Suburban Level 1***	- **Neighborhood services within 1/2 mile of most residences** - Direct connections for pedestrians and bicycles - Interconnected street pattern - Routes that link compact, clustered development - Traffic calming measures
8. **Develop Interconnected Travel Networks** Regular grid or other inter-connected street system	**Encourage multiple streets over isolated, hierarchical multi-lane arterials.**	***same as for Suburban Level 1***	***same as for Suburban Level 1***	- Pedestrian/bicycle connections - Short blocks

* Performance Goal Level: Average Vehicle Miles Traveled per Household per Year

TABLE 6-2

Transportation-Related Land Use STRATEGY PACKAGES for *SUBURBAN AREAS*

STRATEGY DESCRIPTION	**Suburban Level 1** *(Performance Goal: <22,000 VMT/HH)**	**Suburban Level 2** *(Performance Goal: 20,000 - 22,000)**	**Suburban Level 3** *(Performance Goal: 22,000 - 25,000)**	SUPPORTIVE FACTORS
	STRATEGY CHARACTERISTICS:			
9. **Provide Strategic Parking Facilities** Reduce the parking supply to reflect the increased transit use and walking or bicycling occurring as a result of implemented strategies. Parking should facilitate, not inhibit, walking and transit. Management of parking should vary by land use type and proximity to transit.	***Design features include:*** **- Workplace parking managed at all locations - Supply does not exceed demand - On-street parking controlled - Parking shared among uses - Priority parking for bicycles, carpools, vanpools and 'zero-emission' vehicles**	***same as for Suburban Level 1***	***same as for Suburban Level 1***	- Pedestrian and bicycle facilities - Mixed uses within walking distance - Transit service (amount varies by situation)

* Performance Goal Level: Average Vehicle Miles Traveled per Household per Year

TABLE 6-2a

Case Study Examples of:
SUBURBAN COMMUNITIES

SAMPLE COMMUNITY	REGIONAL LOCATION	Average VMT Per Household Per Year	PERFORMANCE GOALS: Average Vehicle Miles of Travel per Household per Year
Alameda	SF Bay Area	**17,000**	**Suburban Level 1:** **(17,000 to 20,000)**
Pasadena (south central area)	Los Angeles	**17,300**	
Daly City	SF Bay Area	**19,300**	
Downey (central area)	Los Angeles	**21,400**	**Suburban Level 2:** **(20,000 to 22,000)**
Alhambra	Los Angeles	**21,700**	
Escondido	San Diego	**21,700**	
Walnut Creek	SF Bay Area	**22,300**	**Suburban Level 3:** **(22,000 to 25,000)**
Lafayette	SF Bay Area	**22,300**	
Clairemont	San Diego	**22,700**	
Riverside (northern area)	Los Angeles	**23,700**	

* Sources: JHK & Associates, *Transportation-Related Land Use Strategies to Minimize Mobile Source Emissions,* 1995, Table 5-2. Source of community data: Dr. John Holtzclaw, *Using Residential Patterns and Transit to Decrease Auto Dependence and Costs,* June 1994. (Community data was grouped and annotated by JHK & Associates and ARB staff.)